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## INTRODUCTION

Burndy wiring accessories have been designed to supplement and enhance Burndy connector selection and use. All have been designed and engineered for easy installation

and long life, reflecting over 65 years of experience and resulting contributions to all aspects of the electrical industry.

## PENETROX®

### HOW TO INSTALL CONNECTORS:

#### 1. Select the right connector.

Always use an aluminum connector for aluminum or copper conductor. And choose a connector that's marked for the wire size you're using. Never use a copper connector on aluminum conductor.

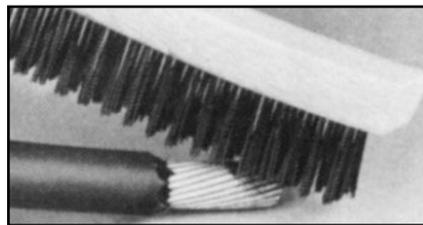


#### 2. Strip carefully.

Remove the insulation without nicking the wire.

#### 3. Brush thoroughly.

Always wire-brush the stripped portion of the wire. An unplated terminal pad, and the surface to which the terminal will be attached should also be wire-brushed.



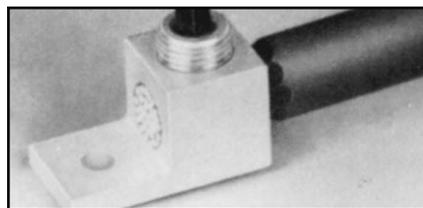
#### 4. Apply PENETROX®

For mechanical connectors, apply PENETROX joint compound liberally to the conductor to prevent the formation of surface oxides once the connection is made. Also apply PENETROX to any terminal pad.



#### 5. Tighten completely.

For mechanical connectors, use wrench or screwdriver to securely tighten the aluminum connectors, as recommended by Burndy.



#### 6. Crimp.

For compression connectors, choose the right die and the right tool. Insert the wire completely and make the recommended number of crimps. Burndy takes the guesswork out of aluminum connections because the connectors and crimp dies are color coded. Crimps can be easily located between marks.





## TYPES PENETROX® A, A-13 AND E

### OXIDE-INHIBITING JOINT COMPOUNDS

PENETROX® oxide-inhibiting compounds produce low initial contact resistance, seal out air and moisture, prevent oxidation or corrosion, exhibit superior weathering characteristics, are usable over wide temperature ranges, and provide a high conductivity "gas-tight" joint. All PENETROX® compounds contain homogeneously suspended metal particles. The suspended metal particles assist in penetrating thin oxide films, act as electrical "bridges" between conductor strands, aid in gripping the conductor, improve electrical conductivity and enhance the integrity of the connection.

The specially formulated PENETROX compounds are for use with compression and bolted connectors providing an improved service life for both copper and aluminum connections. Additionally, the non-toxic compounds are an excellent lubricant for threaded applications reducing galling and seizing.



#### PENA-1 LB

PENA-1 LB is a 1 lb. cartridge filled with PENETROX-A. It's designed to fit standard caulking guns for easy insertion into transmission and distribution connectors. Additionally, this packaging design provides a convenient method for applying PENETROX to many different applications.



#### PENETROX A-13

PENETROX A-13 is a synthetic base compound with evenly suspended zinc particles. It is recommended for aluminum to aluminum, aluminum to copper connection plus aluminum conduit threads. It is compatible with rubber, polyethylene and other insulating materials. UL listed for all voltages.



#### PENETROX A

PENETROX A is a natural (petroleum) base compound with evenly suspended zinc particles. It is recommended for aluminum to aluminum, aluminum to copper connections and aluminum conduit threads. It is not recommended for use with rubber or polyethylene insulated conductors. UL listed to 600V.



#### PENETROX E

PENETROX E is a synthetic base compound with evenly suspended copper particles. It is recommended for copper to copper, copper threads and all grounding applications. UL listed.



## PENETROX A, A-13 AND E

### TECHNICAL INFORMATION

#### PENETROX A

PENETROX A consists of a natural (petroleum) base vehicle in which zinc particles are suspended. For aluminum to aluminum, aluminum to copper applications and aluminum conduit threads. It is not recommended for use with rubber and polyethylene insulated conductors. UL listed to 600 volts.

#### PENETROX A-13

PENETROX A-13 consists of a non-petroleum base vehicle in which zinc particles are suspended. Recommended for aluminum to aluminum, aluminum to copper applications and aluminum conduit threads. Compatible with insulating materials such as rubber, or polyethylene. UL listed and recommended for all voltages.

#### PENETROX E

PENETROX E consists of a non-petroleum base vehicle in which copper granules are suspended. Recommended for copper applications, grounding and for use on copper conduit threads. UL listed.

#### Easy to apply:

1. Scratch brush the conductor surfaces until bright and clean.
2. Immediately apply PENETROX to the conductive surfaces.
3. For EHV applications, remove all excess PENETROX after installation is complete.

#### SHELF LIFE

When stored in its original container in cool (under 100°F) dry environment, PENETROX oxide inhibiting compound will remain workable and functional for (5) years from the date marked on the container provided it is mixed per instructions prior to use.



### PROPERTIES OF PENETROX®

PROPERTY	VALUE PENETROX® DEFINITION	PENETROX® E & A13	A
PENETRATION (UNWORKED)	The value in accordance to ASTM D217 indicates the consistency of a grease. The higher the number, the softer the grease.	250	230
DROPPING POINT (MIN)	The temperature at which the grease passes from the semi-solid to a liquid state under test conditions.	500°F	230°F
POUR POINT (MAX.)	The lowest temperature at which the compound will flow. Pour point is the lubricant's ability to perform in cold conditions.	-10°F	-15°F

\* MSDS sheets available through customer service.

### ORDERING INFORMATION

M-4

CATALOG NUMBER		CONTAINER	CONTAINER TYPE	SIZE
PENETROX® A	PENETROX® A-13	PENETROX® E		
PENA 1/2	PEN A13-3	-	TUBE	3 oz.
PEN A-4	PEN A13-4	PEN E-4	SQUEEZE BOTTLE	4 oz.
P8A	PEN A13-8	PEN E-8	SQUEEZE BOTTLE	8 oz.
PEN A-1LB	PENA13-1LB	-	CARTRIDGE	1 lb.*
PEN A-QT	PEN A13-qt	PEN E-QT	PLASTIC TUB	1 QUART
PEN A-GAL	PEN A13-GAL	PEN E-GAL	CAN	1 GALLON
PEN A-5GAL	PEN A13-5GAL	PEN E-5GAL	PAIL	5 GALLONS
PEN A-55GAL	PEN A13-55GAL	PEN E-55GAL	DRUM	55 GALLONS

\* 1 lb. cartridge will fit standard caulking guns.



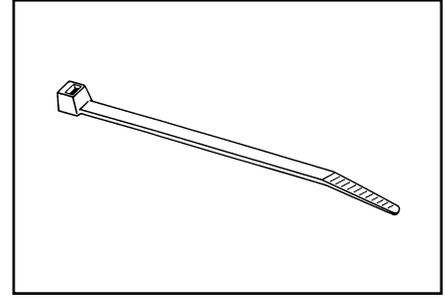
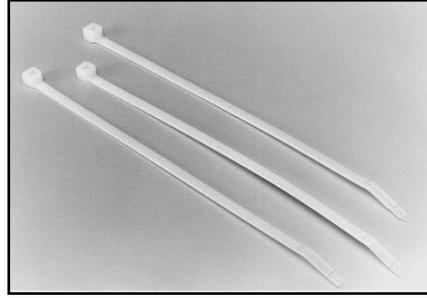
### UNIRAP™

#### NYLON CABLE TIES

#### EQUIVALENT TABLES

#### MILITARY SPECIFICATIONS

BURNDY equivalents to Military Standard MIL-S-23190 in accordance with specification MS 3367 and MS 3368 QPL listed.



MS	TYPE	CLASS	BURNDY NUMBER(S)				
3367-4	I	I	TF3D, TF3D-3 *	TF3, TF3-3 *	TF3DX, TF3D-3X	TF3X, TF3-3X	
3367-4	I	I	TF3D-4	TF3-4	TF3D-4X	TF3-4X	
3367-4	I	II	TF3D-5	TF3-5	TF3D-5X	TF3-5X	
3367-4	I	II	TF3D-8	TF3-8	TF3D-8X	TF3-8X	
3367-5	I	I	TF4D-6	TF4, TF4-6	TF4DX, TF4D-6X	TF4X, TF4-6X	
3367-1	I	I	TF45D-8	TF45-8	TF45D-8X	TF45-8X	
3367-7	I	I	TF45D-11	TF45-11	TF45D-11X	TF45-11X	
3367-2	I	I	TF45D-14	TF45-14	TF45D-14X	TF45-14X	
3367-1	I	I	TF5D, TF5D-8	TF5, TF5-8	TF5DX, TF5D-8X	TF5X, TF5-8X	
3367-7	I	I	TF6D, TF6D-11	TF6, TF6-11	TF6DX, TF6D-11X	TF6X, TF6-11X	
3367-2	I	I	TF8D, TF8D-15	TF8, TF8-15	TF8DX, TF8D-15X	TF8X, TF8-15X	
3367-3	I	I	TF7D, TF7D-15	TF7, TF7-15	TF7DX, TF7D-15X	TF7X, TF7-15X	
3367-6	I	I	TF9D-29		TF9D-29X		
3367-3	I	II	TF10D-15		TF10D-15X		
3367-3	I	II	TF10D-21		TF10D-21X		
3367-6	I	II	TF10D-32		TF10D-32X		
3368-5-E	II	I	TF3LD-4	TF3L-4			
3368-1-A	II	I	TF5LD-8	TF5L-8			
3368-3-C	II	I	TF5LD-8D				
3368-4-D	II	I	TF5LD-8T				
3368-2-A	II	I	TF5LD-15	TF5L-15			

\* TF3D-3-HAL, TF3-3HAL Available: Matl. Halar fluoropolymer. Color maroon. 94VO rated. Radiation resistant to 100 megarads. Low smoke density when burned. Operating temperature range 284°F to -50°F (140°C to -46°C).

# BURNDY

## Accessories

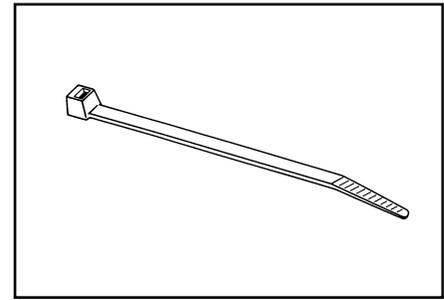
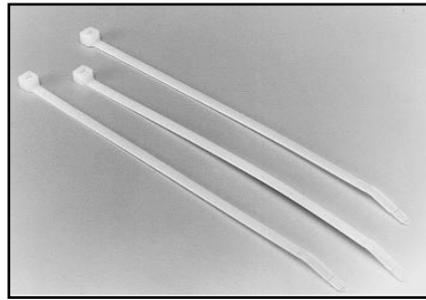


### UNIRAP™

#### NYLON CABLE TIES

UNIRAP cable ties are fabricated of one-piece nylon with no metal parts. The straps are tough, resilient, lightweight and abrasion resistant. They offer high tensile strength and are chemically resistive to solvents, alkalis, oils, grease and diluted acids. Self-locking, they secure without twisting or leaving sharp projections.

Compact heads and prebent tips facilitate cable bundling in a minimum of time and space.



UNIRAP cable ties are designed for both field and production line use and may be installed easily by hand. See previous page for mil-spec table.



CATALOG NUMBER	MAXIMUM BUNDLE DIAMETER	MINIMUM TENSILE UNLOCKING STRENGTH	LENGTH	WIDTH	INSTALLATION TOOLS	BULK CATALOG NUMBER
TF3D	3/4"	18 lbs.	3.60"	.100"	UT-1, UT-50	TF3
TF3D-3	5/8"	18 lbs.	3.37"	.100"		TF3-3
TF3D-4	3/4"	18 lbs.	4.00"	.100"		TF3-4
TF3D-5	1-1/4"	18 lbs.	5.75"	.100"		TF3-5
TF3D-8	2"	18 lbs.	8.00"	.100"		TF3-8
TF4D	1-1/4"	30 lbs.	5.40"	.145"		TF4
TF4D-6	1-1/4"	30 lbs.	6.00"	.140"		TF4-6
TF4D-8	2"	30 lbs.	8.00"	.140"		TF4-8
TF4D-11	3"	30 lbs.	11.25"	.140"		TF4-11
TF4D-14	4"	30 lbs.	14.50"	.140"		TF4-14
TF45D-8	2"	40 lbs.	8.50"	.150"		TF45-8
TF45D-11	3"	40 lbs.	11.50"	.150"		TF45-11
TF45D-14	4"	40 lbs.	14.50"	.150"		TF45-14
TF5D-6	1-1/4"	50 lbs.	6.50"	.180"		TF5-6
TF5D	1-3/4"	50 lbs.	7.25"	.190"		TF5
TF5D-8	1-3/4"	50 lbs.	8.00"	.180"		TF5-8
TF6D	3"	50 lbs.	11.70"	.190"		TF6
TF6D-11	3"	50 lbs.	11.75"	.180"		TF6-11
TF8D	4"	50 lbs.	14.62"	.190"		TF8
TF8D-15	4"	50 lbs.	15.50"	.180"		TF8-15
TF7D-8	2"	120 lbs.	8.875"	.300"	UT-2, UT-10	TF7-8
TF7D-11	3"	120 lbs.	11.875"	.300"		TF7-11
TF7D	3-1/2"	120 lbs.	13.80"	.310"		TF7
TF7D-15	4"	120 lbs.	15.25"	.300"		TF7-15
TF9D-29	9"	120 lbs.	29.75"	.300"		-
TF10D-15	4"	175 lbs.	15.00"	.350"		-
TF10D-21	6"	175 lbs.	21.00"	.350"		-
TF10D-32	9"	175 lbs.	32.00"	.350"		-
TF10D-36	11"	175 lbs.	36.00"	.350"		-
TF10D-34	10"	175 lbs.	34.00"	.370"		-
TF10D-42	13"	175 lbs.	42.00"	.350"		-
TF10D-52	16"	175 lbs.	52.00"	.350"		-

M-6

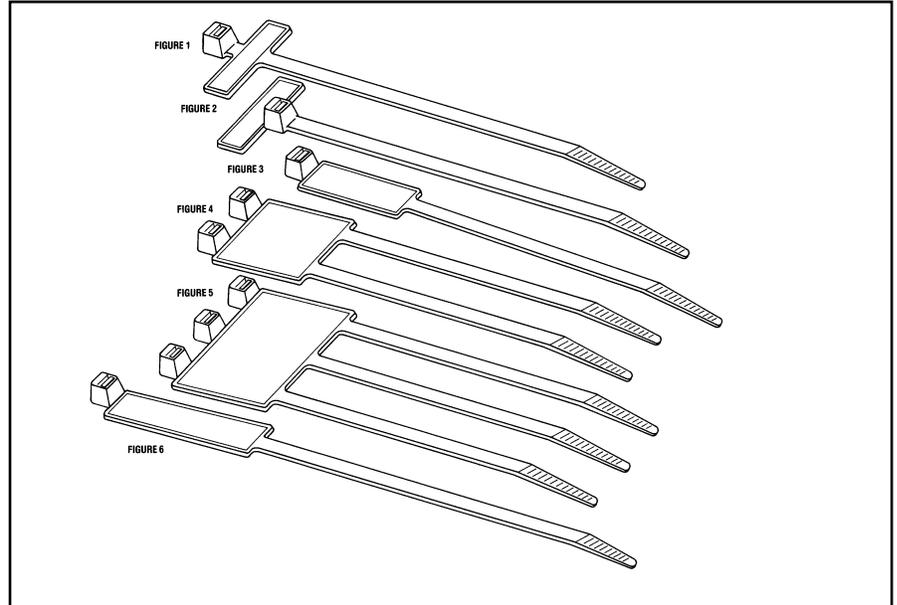
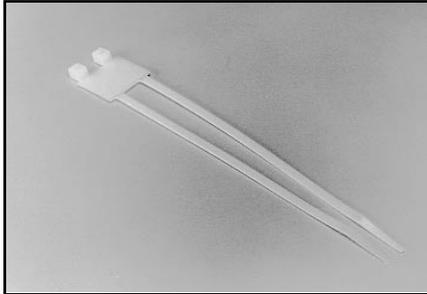
\* For weatherproof UNIRAP ties add suffix "X" to catalog number. Example: TF3DX.  
 For other materials and lengths contact factory. See Tooling Section N for installation tool details.  
 TF3D-4-HAL and TF5D-8-HAL available in 60% HALAR™ for Plenum applications.  
 HALAR is a registered trademark of Allied Fiber and Plastic.



### UNIRAP™

#### IDENTIFICATION CABLE TIES

Identification cable ties are used in both bundling and identifying wire groups at the same time.

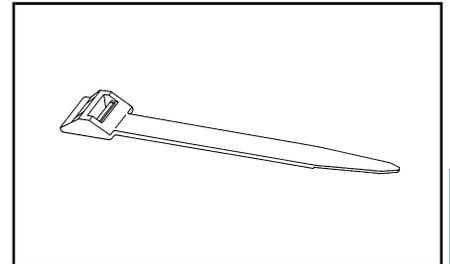
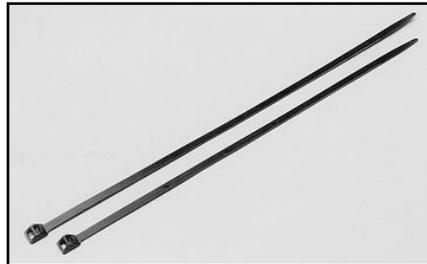


CATALOG NUMBER	MAXIMUM BUNDLE DIAMETER	MINIMUM TENSILE UNLOCKING STRENGTH	LENGTH	WIDTH	FIGURE NUMBER	INSTALLATION TOOLS	BULK CATALOG NUMBER
TF3LD-4	3/4"	18 lbs.	4.00"	.100"	1	UT-1, UT-50	TF3L-4
TF3LD-4F	3/4"	18 lbs.	4.50"	.100"	2	UT-1, UT-50	TF3L-4F
TF5LD	1 3/4"	50 lbs.	7.20"	.190"	3	UT-1, UT-50	TF5L
TF5LD-8D	1 3/4"	50 lbs.	8.00"	.180"	4	UT-1, UT-50	—
TF5LD-8T	1 3/4"	50 lbs.	8.00"	.180"	5	UT-1, UT-50	—
TF5LD-15	4"	50 lbs.	15.00"	.180"	6	UT-1, UT-50	TF5L-15

### UNIRAP™

#### RELEASABLE HEAVY DUTY CABLE TIES

Releasable cable ties are ideal for temporary installations in both industrial and commercial construction applications.



\* For weatherproof UNIRAP ties add suffix "-X" to catalog number. Example TF11D-9RX.

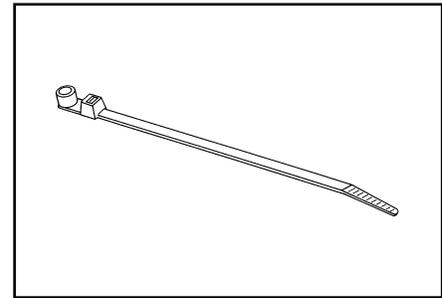
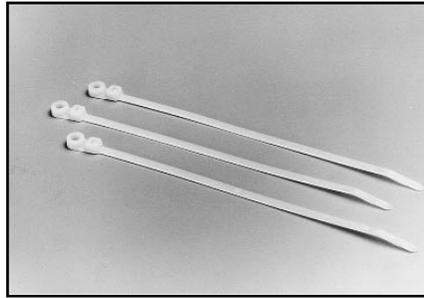
CATALOG NUMBER	MAXIMUM BUNDLE DIAMETER	MINIMUM TENSILE UNLOCKING STRENGTH	LENGTH	WIDTH
TF11D-9R	2"	250 lbs.	9.00"	.500"
TF11D-20R	5"	250 lbs.	20.00"	.500"
TF11D-22R	6"	250 lbs.	22.00"	.500"
TF11D-29R	8"	250 lbs.	29.00"	.500"
TF11D-35R	10"	250 lbs.	35.00"	.500"
TF11D-41R	12"	250 lbs.	41.00"	.500"



### UNIRAP™

#### MOUNTING CABLE TIES

Mounting cable ties are used in situations where cable or wire bundles are being attached to flat surfaces such as walls or control panels. The strap is attached to the mounting surface by means of a screw through the mounting hole.



CATALOG NUMBER	MAXIMUM BUNDLE DIAMETER	MINIMUM TENSILE UNLOCKING STRENGTH	MOUNTIN SCREW SIZE	LENGTH	WIDTH	INSTALLATION TOOLS	BULK CATALOG NUMBER
TF3HD	3/4"	18 lbs.	#4	4.10"	.100"	UT-1, UT-50	TF3H
TF4HD-6	3/4"	30 lbs.	#8	6.25"	.140"	UT-1, UT-50	TF4H-6
TF5HD	1 3/4"	50 lbs.	#10	7.80"	.190"	UT-1, UT-50	TF5H
TF5HD-9	1 3/4"	50 lbs.	#6-32	8.50"	.180"	UT-1, UT-50	TF5H-9
TF8HD-16	4"	50 lbs.	#10	16.00"	.180"	UT-1, UT-50	TF8H-16
TF7HD	3 1/2"	120 lbs.	1/4"	14.20"	.310"	UT-2, UT-175	TF7H

\* For weatherproof UNIRAP ties add suffix "-X" to catalog number. Example: TF3HDX.

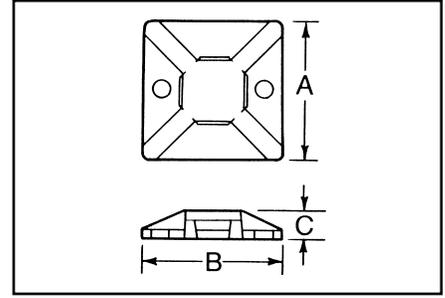
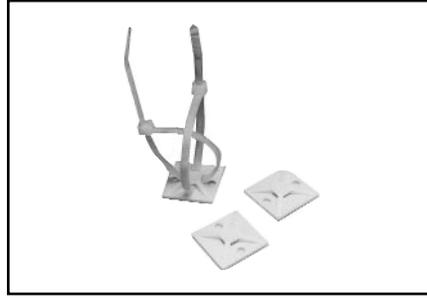


### UNIRAP™

#### MOUNTING CABLE TIES

##### 4-WAY

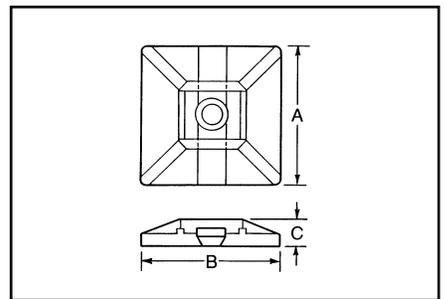
Burndy mounting bases are available in adhesive or screw mount forms. The 4-way mounting bases come in 3 sizes to accommodate UNIRAPs from 18 lbs. tensile strength up to 175 lbs. All bases are made of standard nylon and are offered in weather resistant forms



CATALOG NUMBER	MAXIMUM TIE WIDTH	MOUNTING TECHNIQUE	DIMENSIONS - INCHES		
			A	B	C
TFB3D-4S	.140"	#4 Screw	.750"	.750"	.150"
TFB3D-4A	.140"	Adhesive	.750"	.750"	.150"
TFB5D-4S	.190"	#8 Screw	1.125"	1.125"	.190"
TFB5D-4A	.190"	Adhesive	1.125"	1.125"	.190"
TFB7D-4S	.350"	#8 Screw	1.500"	1.500"	.250"
TFB7D-4A	.350"	Adhesive	1.500"	1.500"	.250"

\* For weatherproof UNIRAP bases add suffix "-X" to catalog number. Example: TFB3D-4SX.

##### 2-WAY



CATALOG NUMBER	MAXIMUM TIE WIDTH	MOUNTING TECHNIQUE	DIMENSIONS - INCHES		
			A	B	C
TFB5D-2S	.190"	#6 Screw	1.125"	1.125"	.210"
TFB5D-2A	.190"	Adhesive	1.125"	1.125"	.210"

\* For weatherproof UNIRAP bases add suffix "-X" to catalog number. Example: TFB5D-2SX.



### TYPE HP-N

#### NYLOCLIP® CABLE HANGER

NYLOCLIP cable hangers are fabricated one-piece nylon, with no metal parts. Tough, resilient, lightweight and abrasion resistant, NYLOCLIP cable hangers offer high tensile strength and are resistant to solvents, alkalis, oils grease and diluted acids.

Available in white or black UV/weather resistant material.

Meets Mil spec M-20693, ASTM STD D4066 Group 1 Class 1.

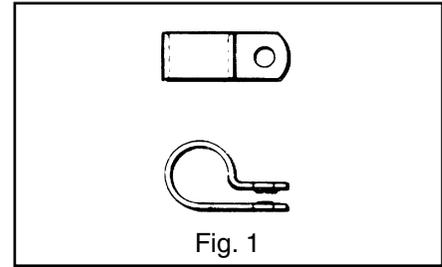
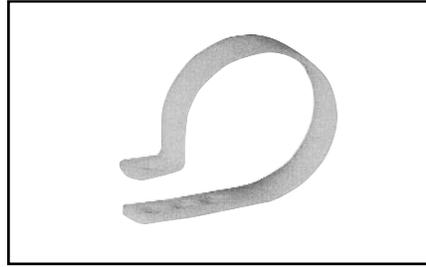


Fig. 1

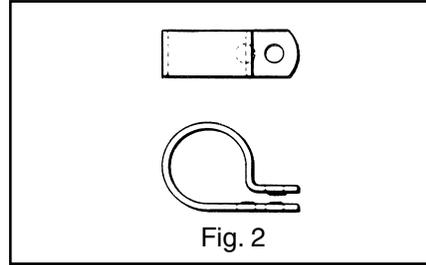


Fig. 2

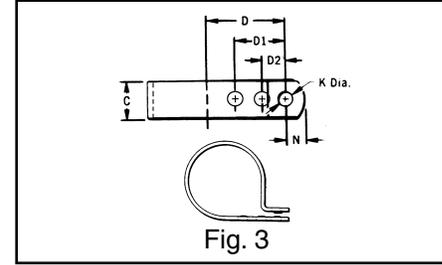


Fig. 3

CATALOG NUMBER	FIG. NO.	C	D*	D1	D2	N	K DIA.	SCREW SIZE	WIRE BUNDLE DIAMETER			BULK CATALOG NUMBER
									HOLE 1	HOLE 2	HOLE 3	
HP-2N BOX	1	.38	.37	-	-	.19	.17	#8	.10	-	-	HP-2N
HP-3N BOX	1	.38	.40	-	-	.19	.17	#8	.18	-	-	HP-3N
HP-4N BOX	1	.38	.43	-	-	.19	.17	#8	.22	-	-	HP-4N
HP-5N BOX	1	.38	.46	-	-	.19	.17	#8	.29	-	-	HP-5N
HP-6N BOX	1	.38	.50	-	-	.19	.17	#8	.33	-	-	HP-6N
HP-7N BOX	1	.38	.52	-	-	.19	.17	#8	.42	-	-	HP-7N
HP-8N BOX	1	.38	.54	-	-	.19	.17	#8	.47	-	-	HP-8N
HP-9N BOX	1	.38	.57	-	-	.19	.17	#8	.53	-	-	HP-9N
HP-10N BOX	1	.38	.61	-	-	.19	.17	#8	.62	-	-	HP-10N
HP-11N BOX	1	.50	.65	-	-	.25	.20	#10	.66	-	-	HP-11N
HP-12N BOX	1	.50	.69	-	-	.25	.20	#10	.70	-	-	HP-12N
HP-13N BOX	1	.50	.72	-	-	.25	.20	#10	.82	-	-	HP-13N
HP-14N BOX	2	.50	.76	.31	-	.25	.20	#10	.84	.73	-	HP-14N
HP-16N BOX	2	.50	.82	.31	-	.25	.20	#10	.96	.88	-	HP-16N
HP-18N BOX	2	.50	.86	.31	-	.25	.20	#10	1.05	.95	-	HP-18N
HP-24N BOX	3	.50	.95	.62	.31	.25	.20	#10	1.47	1.38	1.23	HP-24N
HP-32N BOX	3	.50	1.25	.81	.38	.25	.20	#10	1.92	1.82	1.72	HP-32N

M-10

For weatherproof UNIRAP ties add suffix "-X" to catalog number. Example: HP-24NX BOX or HP-24NX.  
\* D - Distance from hole 1 centerline of cable bundle.



## STAINLESS STEEL STRAP AND ACCESSORIES

Stainless Steel straps are designed for use in many applications where a wrap around method is required for securing objects to outside perimeter surfaces. The FCI Stainless Steel Strap system includes strap in convenient tote carrying packages, buckles for securing the strap and installation tooling designed for a convenient and reliable clamping application. Straps and buckles are manufactured from a type 301 stainless steel which provides a high strength and corrosion resistant application.

### TOTES

FCI offers two sizes of stainless steel strap for banding applications. Straps are marked to identify 1 foot increments and are packaged in easy to use totes. The color coded totes incorporate a rewind feature for convenient storage of unused strap after installation.

101.7 ft per roll (31 m)

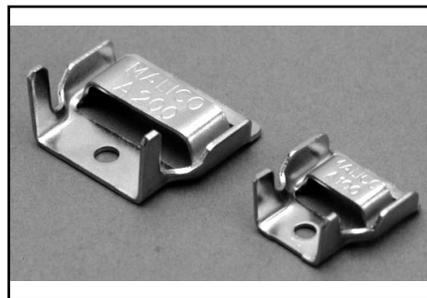
Type 301 Stainless Steel



Catalog Number	Tote Color	Width		Thickness		Weight	
		Inches	mm	Inches	mm	Lbs	Kg
F107C31	Yellow	.39	10	.028	.70	4.31	1.955
F207C31	Red	.79	20	.028	.70	7.75	3.515

### BUCKLES

Type 301 Stainless Steel buckles are designed to provide secure installation of stainless straps.



Catalog Number	Width		Weight per 100		For Use With
	Inches	mm	Lbs	Kg	
A100	0.433	11	0.771	0.350	F107C31
A200	0.826	21	1.830	0.830	F207C31

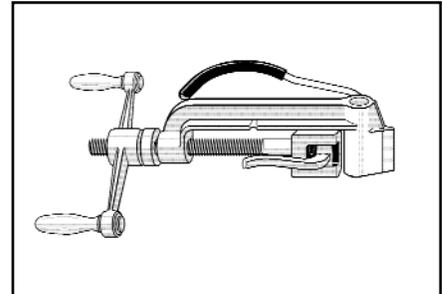


## STAINLESS STEEL STRAP INSTALLATION TOOLS

### TYPE OPV

OPV - Bench screw type band installation tool with carrying case. Bench screw type tool provides tensioning capability with a built in cutter. This tool incorporates a gripper to secure the strap and a spin handle for easy tensioning.

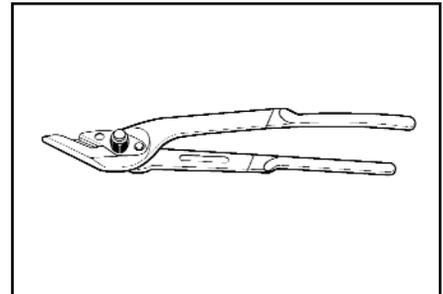
4 lbs. 1.8 kg



### TYPE OPC

The OPC cutting tool is manufactured from heat treated steel and includes a strap cutting guide for safe, easy cutting operations.

1.50 lbs. 0.68 kg





### HS-T-PF

#### THIN WALL HEAT SHRINK TUBING

#### CROSS-LINKED POLYOLEFIN

#### 6 INCH LENGTHS



Type HS-T-PF is a flexible thin wall, flame retardant heat shrink tubing made of cross-linked polyolefin. The 2:1 shrink ratio allows for faster shrink recovery, covering wire sizes: #18 AWG to 300 kcmil. Operating temperatures from -55°C to 135°C with a shrink temperature of 120°C.



Meets MIL-I-25053/5  
600 VOLTS

SURFACE MARKED

Catalog Number	Nominal Diameter Inches	Min. Exp. ID In.	Max. Recov. ID In.	Nom. Wall Thickness In.	Conductor Range	# Pcs. Black	# Pcs. Ea. Color
HSM116T6PF26	1/16	0.06	0.03	0.018	#18	8	3
HSB116T6PF26	1/16	0.06	0.03	0.018	#18	26	0
HSM332T6PF24	3/32	0.09	0.05	0.020	#18-16	6	3
HSB332T6PF24	3/32	0.09	0.05	0.020	#18-16	24	0
HSM18T6PF20	1/8	0.12	0.06	0.020	#18-14	2	3
HSB18T6PF20	1/8	0.12	0.06	0.020	#18-14	20	0
HSM316T6PF18	3/16	0.19	0.09	0.020	#18-12	6	2
HSB316T6PF18	3/16	0.19	0.09	0.020	#18-12	18	0
HSM14T6PF14	1/4	0.25	0.12	0.180	#14-10	2	2
HSB14T6PF14	1/4	0.25	0.12	0.180	#14-10	14	0
HSM38T6PF12	3/8	0.38	0.19	0.020	#8-6	6	1
HSB38T6PF12	3/8	0.38	0.19	0.020	#8-6	12	0
HSM12T6PF10	1/2	0.50	0.12	0.020	#6-2	4	1
HSB12T6PF10	1/2	0.50	0.12	0.020	#6-2	10	0
HSM34T6PF8	3/4	0.75	0.38	0.020	#1 - 3/0	2	1
HSB34T6PF8	3/4	0.75	0.38	0.020	#1 - 3/0	8	0
HSM100T6PF6	1	1.00	0.50	0.180	2/0 - 300	1	1
HSB100T6PF7	1	1.00	0.50	0.180	2/0 - 300	7	0

HSB series - all black

HSM series - multiple colors: black, blue, clear, green, red, white, yellow

HSB11612T6PF14	1/16, 3/32, 1/8, 3/16, 1/4, 3/8, 1/2					14	0
HSB38100T6PF8	3/8, 1/2, 3/4, 1"					8	0

Multiple diameter packages contain two pieces of each size listed: Black only.



### HS-T-PF

#### THIN WALL HEAT SHRINK TUBING

#### CROSS-LINKED POLYOLEFIN 4 FOOT REELS

Type HS-T-PF is a flexible thin wall, flame retardant heat shrink tubing made of cross-linked polyolefin. The 2:1 shrink ratio allows for faster shrink recovery, covering wire sizes #18 AWG to 300 kcmil. Operating temperatures from -55°C to 135°C with a shrink temperature of 120°C.



Meets MIL-I-25053/5  
600 VOLTS



SPECIFY COLOR CODE IN THIRD POSITION OF CATALOG NUMBER:

SURFACE MARKED

Example: HSC116T48PF

- B: BLACK
- BL: BLUE
- C: CLEAR
- G: GREEN
- R: RED
- W: WHITE
- Y: YELLOW

Catalog Number	Nominal Diameter Inches	Min. Exp. ID In.	Max. Recov. ID In.	Nom. Wall Thickness In.	Conductor Range
HS_116T48PF	1/16	0.06	0.03	0.018	#18
HS_332T48PF	3/32	0.09	0.05	0.020	#18-16
HS_18T48PF	1/8	0.12	0.06	0.020	#18-14
HS_316T48PF	3/16	0.19	0.09	0.020	#18-12
HS_14T48PF	1/4	0.25	0.12	0.180	#14-10
HS_38T48PF	3/8	0.38	0.19	0.020	#8-6
HS_12T48PF	1/2	0.50	0.12	0.020	#6-2
HS_34T48PF	3/4	0.75	0.38	0.020	#1 - 3/0
HS_100T48PF	1	1.00	0.50	0.180	2/0 - 300
HS_150T48PF	1-1/2	1.50	.75	0.180	2/0 - 350
HS_200T48PF	2	2.00	1.00	0.180	250 - 500



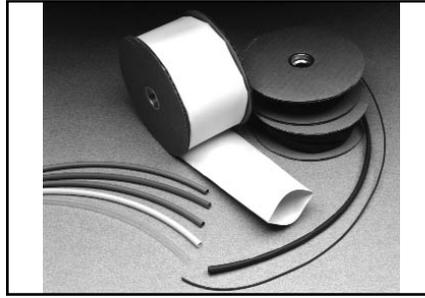
### HS-T-PF

#### THIN-WALL HEAT SHRINK TUBING

#### CROSS-LINKED POLYOLEFIN

#### 25 FOOT REELS

Type HS-T-PF is a flexible thin wall, flame retardant heat shrink tubing made of cross-linked polyolefin. The 2:1 shrink ratio allows for faster shrink recovery, covering wire sizes #18 AWG to 300 kcmil. Operating temperatures from -55°C to 135°C with a shrink temperature of 120°C.



SPECIFY COLOR CODE IN THIRD POSITION OF CATALOG NUMBER:

Example: HSC116T300PF

- B: BLACK
- BL: BLUE
- C: CLEAR
- G: GREEN
- R: RED
- W: WHITE
- Y: YELLOW



Meets MIL-I-25053/5  
600 VOLTS

Catalog Number	Nominal Diameter Inches	Min. Exp. ID In.	Max. Recov. ID In.	Nom. Wall Thickness In.	Conductor Range
HS_116T300PF	1/16	0.06	0.03	0.018	#18
HS_332T300PF	3/32	0.09	0.05	0.020	#18-16
HS_18T300PF	1/8	0.12	0.06	0.020	#18-14
HS_316T300PF	3/16	0.19	0.09	0.020	#18-12
HS_14T300PF	1/4	0.25	0.12	0.180	#14-10
HS_38T300PF	3/8	0.38	0.19	0.020	#8-6
HS_12T300PF	1/2	0.50	0.12	0.020	#6-2
HS_34T300PF	3/4	0.75	0.38	0.020	#1 - 3/0
HS_100T300PF	1	1.00	0.50	0.180	2/0 - 300

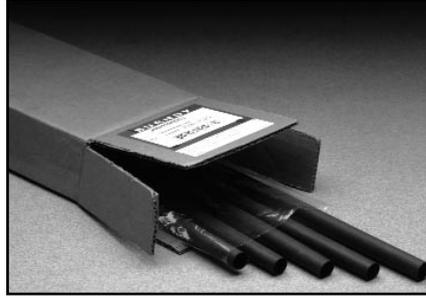


### HS-SR-PF

#### SEMI-RIGID HEAT SHRINK TUBING

#### CROSS-LINKED POLYOLEFIN 4 FOOT STICKS

Type HS-SR-PF is a semi-rigid, flame retardant heat shrink tubing made of cross-linked polyolefin. The shrink ratio is 3:1, and the inside diameter is coated with an adhesive sealant to protect against moisture and corrosion. Accommodates #18 AWG to 300 kcmil conductors. Operating temperatures from -40°C to 110°C with a shrink temperature of 125°C.



SURFACE MARKED



Meets MIL-I-25053/4  
600 VOLTS

Catalog Number	Nominal Diameter Inches	Min. Exp. ID In.	Max. Recov. ID In.	Nom. Wall Thickness In.	Conductor Range
HSB18SR48PF5	1/8	0.13	0.04	0.040	#18
HSB316SR48PF5	3/16	0.19	0.06	0.050	#18-14
HSB14SR48PF5	1/4	0.25	0.08	0.060	#18-10
HSB38SR48PF5	3/8	0.38	0.12	0.070	#14-6
HSB12SR48PF5	1/2	0.50	0.16	0.070	#8-2
HSB34SR48PF5	3/4	0.75	0.23	0.080	#4-3/0
HSB100SR48PF5	1	1.00	0.32	0.100	#1-300

Available in black only.  
Five per box.



### HS-H-PF

#### HEAVY WALL HEAT SHRINK TUBING

#### CROSS-LINKED POLYOLEFIN

#### CUT LENGTHS AND 4 FOOT STICKS



SURFACE MARKED

Type HS-H-PF is a heavy wall, flame retardant heat shrink tubing made of cross-linked polyolefin. The shrink ratio is 3:1, and the inside diameter is coated with an adhesive sealant to protect against moisture and corrosion. UL486D listed for direct burial applications. Accommodates #14 AWG - 500 kcmil conductors. Operating temperatures from -55°C to 135°C with a shrink temperature of 120°C.



Meets MIL-I-25053/5  
600 VOLTS

Catalog Number	Length	Nominal Diameter Inches	Min. Exp. ID In.	Max. Recov. ID In.	Nom. Wall Thickness In.	Conductor Range
HSB35H3PF25	3"	.350	.350	.150	0.070	#14-10
HSB35H6PF25	6"	.350	.350	.150	0.070	#14-10
HSB35H48PF5	4'	.350	.350	.150	0.070	#14-10
HSB34H6PF10	6"	.750	.750	.220	0.090	#6-2
HSB34H9PF10	9"	.750	.750	.220	0.090	#6-2
HSB34H48PF5	4'	.750	.750	.220	0.090	#6-2
HSB110H6PF5	6"	1.100	1.100	.400	0.120	#1-3/0
HSB110H9PF5	9"	1.100	1.100	.400	0.120	#1-3/0
HSB110H48PF3	4'	1.100	1.100	.400	0.120	#1-3/0
HSB150H9PF3	9"	1.500	1.500	.500	0.160	2/0-350
HSB150H12PF3	12"	1.500	1.500	.500	0.160	2/0-350
HSB150H48PF5	4'	1.500	1.500	.500	0.160	2/0-350
HSB200H9PF2	9"	2.000	2.000	.750	0.160	250-500
HSB200H12PF2	12"	2.000	2.000	.750	0.160	250-500
HSB200H48PF2	4'	2.000	2.000	.750	0.160	250-500

Available in black only.



### TYPE HSIC - FR

#### HEAVY WALL HEAT SHRINKABLE END CAP

UL LISTED TO 600V

Type HSIC-FR, Heat Shrink Insulating End Cap Fire Retardant is a heavy wall, fire retardant end cap made of cross-linked thermally stabilized black polyolefin. Used to insulate exposed conductors in energized applications. The 3:1 shrink ratio offers greater range, accommodating copper wire sizes, #8 AWG thru 2500+ kcmil. Performs effectively over lead, aluminum, steel, polyethylene, EPR, and PVC jacketed materials. Blue thermal chromatic lines disappear indicating correct installation temperature and provide inspectability. I.D. adhesive provides superior moisture and weather resistant characteristics.

#### Features and Benefits

- Minimum 28 Oxygen index, UL94-VO rated.
  - ◊ Self-extinguishing flame retardant properties.
- 3:1 shrink ratio.
  - ◊ Minimum inventory required.
- Thermal chromatic lines.
  - ◊ Indicate proper installation.
- Low shrink temperature, 150°C.
  - ◊ Only requires common hot air gun to apply.
- Meets sealing requirements: ANSI-C119.1, UL486D
  - ◊ Weather and moisture resistant.



CATALOG NUMBER	600V CABLE		INTERNAL DIAMETER		WALL THICKNESS		LENGTH ± 20%	
	CODE	FLEX	(MIN) EXP.	(MAX) REC.	EXP.	REC. ± 20%	EXP.	REC.
HSIC8-1FR	#8 - #1	#8 - #4	.50	.16	.034	.080	3.0	2.50
HSIC4-40FR	#4 - 4/0	#4 - 2/0	.75	.24	.030	.080	3.5	2.50
HSIC10-500FR	1/0 - 500 kcmil	#1 - 313.1 kcmil	1.10	.35	.039	.120	4.0	3.00
HSIC30-1000FR	3/0 - 1000 kcmil	2/0 - 646 kcmil	1.50	.47	.054	.160	4.5	3.25
HSIC200FR	300 - 1750 kcmil	250 - 1111 kcmil	2.00	.63	.050	.160	4.5	3.50
HSIC269FR	600 - 2500 kcmil	-	2.68	.87	.050	.160	5.0	4.00
HSIC350FR	1250 kcmil (min)	-	3.50	1.18	.051	.160	5.0	4.50

M-18



1. Slide the HSIC-FR end cap onto the cable and hold in place using forefinger or thumb.



2. Beginning at closed end apply heat, blue thermochromatic lines will begin to disappear at 150°C. Gradually, move heat source to open end and around cap. Once lines are no longer visible and adhesive flows out of open end, discontinue heating.



### TYPE HSC-FR

#### VISI-SHRINK

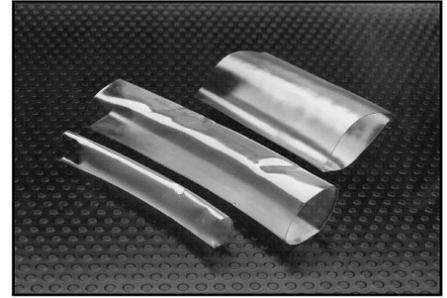
#### FIRE RETARDANT CLEAR HEAT SHRINK TUBING

#### UL RECOGNIZED TO 600V

Type HSC-FR is a flexible polyvinyl chloride clear heat-shrink tubing. Excellent flame retardant properties and a 2:1 shrink ratio, the VISI-SHRINK tubing enables inspectors to read die index embossments on installed connectors easily. UL recognized, 105°C, 600V, the operating temperature from -20°C to 105°C with a shrink temperature of 135°C.

#### Features and Benefits

- UL 224, VW-1 Rated
  - ◊ Self-extinguishing flame retardant properties
- Clear Tubing
  - ◊ Allows inspection of die index embossed and shiner after installation is complete. Should any corrosion occur it will be visible during inspection.
- Low Shrink Temperature
  - ◊ Only requires common hot air guns to apply.



CATALOG NUMBER	ID EXPANDED	ID AFTER RECOVERY	WALL THICKNESS	CONDUCTOR RANGE		STANDARD REEL SIZE (FEET)
				CODE	FLEX	
HSC18FR	.125	.062	.025	#16-#14	#16-#14	50
HSC18FR250	.125	.062	.025	#16-#14	#16-#14	250
HSC14FR	.250	.125	.025	#12-#8	#12-#10	50
HSC14FR250	.250	.125	.025	#12-#8	#12-#10	250
HSC38FR	.375	.187	.025	#6-#4	#8-#6	50
HSC38FR250	.375	.187	.025	#6-#4	#8-#6	250
HSC12FR	.500	.250	.025	#4-#1	#6-#4	50
HSC12FR250	.500	.250	.025	#4-#1	#6-#4	250
HSC34FR	.750	.375	.030	1/0-3/0	#2-1/0	50
HSC34FR250	.750	.375	.030	1/0-3/0	#2-1/0	250
HSC100FR	1.00	.500	.035	4/0-3/0	1/0-4/0	25
HSC100FR100	1.00	.500	.035	4/0-3/0	1/0-4/0	100
HSC112FR	1.50	.750	.040	350-750	250-500	25
HSC112FR100	1.50	.750	.040	350-750	250-500	100
HSC200FR	2.00	.750	.045	800-1000	500-750	25
HSC200FR100	2.00	.750	.045	800-1000	500-750	100

#### NOTES:

Shrink temperature is 135°C (275°F)

For best results move heat gun along the length of heat shrink to avoid concentrations.

To extend useful life, store material below 70°F.

For additional Heat Shrinkable Tubing see "URD" section Type RYAC and RK169-2, RK170-2 in this section.



### TYPE HS-FR

#### THIN-WALL HEAT SHRINK

#### FIRE RETARDANT HEAT SHRINK TUBING

#### UL RECOGNIZED TO 600V

Type HS-FR is a flexible polyvinyl chloride thin-wall heat-shrink. Offering insulating, color identification and strain relieving properties for terminations and splices. The 2:1 shrink ratio allows for faster shrink recovery, covering wire sizes: #16AWG to 1000 kcmil. UL recognized, 105°C, 600V, operating temperatures from -20°C to 105°C with a shrink temperature of 135°C.

#### Features and Benefits

- UL 224, VW-1 Rated
  - ◊ Self-extinguishing flame retardant properties.
- Multi-use Tubing
  - ◊ Insulate, strain relief.
- Easy Identification
  - ◊ Available in wide range of colors.
- Low Shrink Temperature
  - ◊ Only requires common hot air guns to apply.



How to Order

Ex: HSB18FR

- B** - Black
- BLU** - Blue
- G** - Green
- R** - Red
- W** - White
- Y** - Yellow



Catalog Number	ID Expanded	ID After Recovery	Wall Thickness	Conductor Range		Standard Reel Size (Feet)
				Code	Flex	
HS_18FR	.125	.062	.025	#16-#14	#16-#14	50
HS_18FR250	.125	.062	.025	#16-#14	#16-#14	250
HS_14FR	.250	.125	.025	#12-#8	#12-#10	50
HS_14FR250	.250	.125	.025	#12-#8	#12-#10	250
HS_38FR	.375	.187	.025	#6-#4	#8-#6	50
HS_38FR250	.375	.187	.025	#6-#4	#8-#6	250
HS_12FR	.500	.250	.025	#4-#1	#6-#4	50
HS_12FR250	.500	.250	.025	#4-#1	#6-#4	250
HS_34FR	.750	.375	.030	1/0-3/0	#2-1/0	50
HS_34FR250	.750	.375	.030	1/0-3/0	#2-1/0	250
HS_100FR	1.00	.500	.035	4/0-3/0	1/0-4/0	25
HS_100FR100	1.00	.500	.035	4/0-3/0	1/0-4/0	100
HS_112FR	1.50	.750	.040	350-750	250-500	25
HS_112FR100	1.50	.750	.040	350-750	250-500	100
HS_200FR	2.00	.750	.045	800-1000	500-750	25
HS_200FR100	2.00	.750	.045	800-1000	500-750	100

#### NOTES:

Shrink temperature is 105°C (221°F)

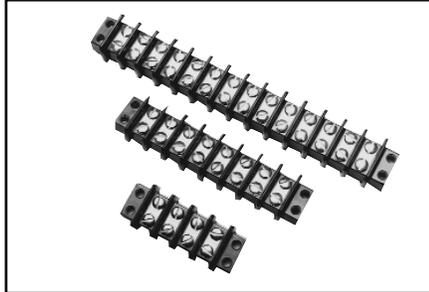
For best results move heat gun along the length of heat shrink to avoid concentrations.

To extend useful life, store material below 70°F.

For additional Heat Shrinkable Tubing see "URD" section Type RYAC and RK169-2, RK170-2 in this section.



## MISCELLANEOUS ACCESSORIES



### TERMINAL BLOCKS

NUMBER OF CIRCUITS	OVERALL LENGTH	GENERAL DESCRIPTION	CATALOG NUMBER
2 4 6	2-3/32" 3-7/32" 4-11/32"	Moulded General Purpose Phenolic Base 30 amps, #10 studs.	<b>RK149-2</b> <b>RK150-2</b> <b>RK225-2</b>
8 10 12	5-15/32" 6-19/32" 7-23/32"	1 pc, per card 600-volt rating	<b>RK151-2</b> <b>RK152-2</b> <b>RK226-2</b>
14 16	8-27/32" 9-31/32"		<b>RK153-2</b> <b>RK227-2</b>

For bulk pack contact factory.

Meets UL component requirements:

CLASS B: Commercial Equipment      600 V RMS

CLASS C: General Industrial            600 V RMS

Withstands volts, Vdc                    10,500

### PANEL LIGHTS

#### SNAP-IN TYPES\*



VOLTAGE RATING	LENS COLOR	MOUNTING HOLE DIAMETER	LEADS	CATALOG NUMBER	CARD QUANTITY
125V	Red	1/2"	6"	<b>RK160-2</b>	1
125V	Yellow	1/2"	6"	<b>RK161-2</b>	1
125V	Green	1/2"	6"	<b>RK162-2</b>	1
125V	Red	5/16"	6"	<b>RK236-2</b>	1
125V	Yellow	5/16"	6"	<b>RK237-2</b>	1
125V	Green	5/16"	6"	<b>RK238-2</b>	1
28V	Red	1/2"	6"	<b>RK231-2</b>	1
28V	Yellow	1/2"	6"	<b>RK230-2</b>	1
28V	Green	1/2"	6"	<b>RK232-2</b>	1
12V	Red	1/2"	6"	<b>RK163-2</b>	1
12V	Yellow	1/2"	6"	<b>RK164-2</b>	1
12V	Green	1/2"	6"	<b>RK165-2</b>	1

M-21

\*Available in convenience packaging only.



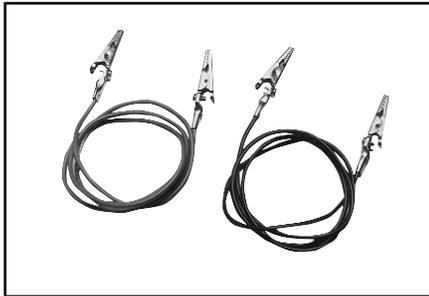
### PIGTAIL WIRE CONNECTORS\*



PACKAGE QUANTITY	WIRE COMBINATION RANGE AND COLOR CODE	CATALOG NUMBER
25	Black 22-14 AWG-Min. 3#20 Max. 3#16	<b>RK239-2</b>
25	Orange 22-14 AWG-Min. 3#20 Max. 3#16 & 1#18	<b>RK240-2</b>
25	Yellow 18-12 AWG-Min. 1#14 & 1#18 Max. 4#14 & 1#18	<b>RK241-2</b>
20	Red 18-10 AWG-Min. 2#14 Max. 2#10 & 2#14	<b>RK242-2</b>
10	Blue 12-6 AWG-Min. 1#10 & 1#12 Max. 1#6 & 2#8	<b>RK257-2</b>

\*Available in convenience packaging only.

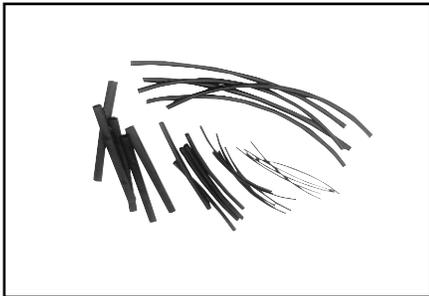
### ALLIGATOR CLIPS\*



WIRE RANGE	LENGTH	JAW LENGTH	CATALOG NUMBER	CARD QUANTITY
22-16 AWG	1-11/16"	5/16"	<b>RK154-2</b>	4
22-14 AWG	2"	7/16"	<b>RK155-2</b>	4
22-10 AWG	2-7/8"	3/4"	<b>RK229-2</b>	4

\*Available in convenience packaging only.

### HEAT SHRINK TUBING\*



DESCRIPTION	CATALOG NUMBER
Heat Shrink Tubing Assortment 1/16" dia. to 3/8" dia. x 6" long. 20 pcs. per bag.	<b>RK169-2</b>
Heat Shrink Tubing 1/4" dia. x 12" long. 8 pcs per bag.	<b>RK170-2</b>

\*Available in convenience packaging only.



### TYPE HL1802E

#### STEINEL® HOT AIR GUN

120° - 1100° F (50° - 650° C)

STEINEL® professional hot air gun and accessories are recommended for all of your BURNDY heat shrink applications. The HL1802E hot air gun is UL and CSA listed for 120 volts. It has a temperature range of 120° - 1100° F (50° - 650°C) and a cool air stage.



	TECHNICAL SPECIFICATIONS:	UL / CSA LISTED:
<b>VOLTAGE:</b>	230 V AC	120 V AC
<b>OUTPUT:</b>	2,000 WATTS	1,500 WATTS
<b>TEMPERATURE:</b>	SETTING 1: 50°C	120°F
	SETTING 2: 50°C - 650°C	120 - 1100° F
	SETTING 3: 50°C - 650°C	120 - 1100° F
<b>AIR FLOW:</b>	SETTING 1: 8.8 cfm	
	SETTING 2: 9.5 cfm	
	SETTING 3: 17.6 cfm	
<b>WEIGHT:</b>	30.7 oz	
<b>NOISE:</b>	< 70 dB (A)	

#### ACCESSORIES

CATALOG #	DESCRIPTION
HSREDUCER	3/8" Reduction Nozzle for concentrated air flow
HSREFLECTOR1	1 1/4" Reflector Nozzle accommodating up to 1" tubing.
HSREFLECTOR1/2	5/8" Reflector Nozzle accommodating up to 1/2" tubing.
HSSTAND	Metal Stand for bench work applications.

### MISCELLANEOUS ACCESSORIES



LISTED  
CIRCUIT  
TESTER

#### CIRCUIT TESTER FOR 3 WIRE 125V CIRCUITS

VOLTAGE RATING	GENERAL DESCRIPTION	CATALOG NUMBER
125V	Indicates: Correct wiring, open ground, reverse polarity, open hot wire, open neutral, hot and ground reversed, and hot on neutral and hot open.	RK228-2

#### ALLIGATOR TEST LEADS

JUMPER	LENGTH	CATALOG NUMBER
600V 18 AWG	32"	RK191-2